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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,740	10/20/2005	Real Champagne	CHA001	7768
	7590 10/30/200 WHITELAW, PLC		EXAMINER	
12471 DILLING	GHAM SQUARE, #30		MCKANE, ELIZABETH L	
WOODBRIDGE, VA 22192			ART UNIT	PAPER NUMBER
			1797	
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			10/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/553,740	CHAMPAGNE, REAL		
Office Action Summary	Examiner	Art Unit		
	ELIZABETH L. MCKANE	1797		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period in Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
1) ☐ Responsive to communication(s) filed on 20 C 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for allowa closed in accordance with the practice under E	s action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4)  Claim(s) 36-54 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 36-54 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration. or election requirement.			
<ul> <li>9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 20 October 2005 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Example 11.</li> </ul>	: a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) \[ \sum \text{Notice of References Cited (PTO-892)} \]	4) ☐ Interview Summary	(PTO-413)		
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 10202005, 07272006, 11302007.</li> </ul>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte		

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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 36, 37, 43, 44, 49, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Robitaille et al. (US 2002/0085950).

Robitaille et al. teaches a process for humidifying an atmosphere in an ozone sterilization chamber 10 to a target relative humidity. The method of Robitaille et al. includes (a) providing an amount of water in a water reservoir 32 at a temperature T<sub>s</sub> at or above a temperature of the chamber atmosphere T<sub>c</sub> (paragraphs [0039], [0052]), (b) reducing a pressure in the chamber to a value below the boiling point of water at the reservoir temperature T<sub>s</sub> ([0039]), and (c) bringing the reservoir 32 into fluid communication with the chamber 10 so that the water in the reservoir is boiled and enters the chamber ([0039]). After a preselected time, fluid connection between the reservoir and chamber is disconnected. See paragraph [0064]. Robitaille et al. further discloses that "during the humidification period, valve 34 opens and closes several times for a pre-set period of time to control the increasing rate of the relative humidity inside the chamber" (paragraph [0064]). Thus, (b) and (c) are repeated a plurality of times because each time the valve is closed, the water vapor is absorbed by articles in the chamber, reducing the pressure of the chamber. This pressure value necessarily remains lower than that in the water reservoir because when the valve re-opens, water

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vapor again flows from the reservoir to the chamber until the valve close again.

Robitaille et al. also teaches that condensation on articles within the chamber is avoided (paragraph [0050]).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 38-42, 45-48, and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robitaille et al..

With respect to claims 38 and 45, as set forth above, Robitaille et al. discloses that "during the humidification period, valve **34** opens and closes several times for a pre-set period of time to control the increasing rate of the relative humidity inside the chamber" (paragraph [0064]). Furthermore, Robitaille et al. teaches that the temperature within the reservoir is preferably maintained in order to prevent

condensation and freezing of the water. See paragraph [0083]. This is achieved by heating the humidifier (paragraphs [0083], [0052] to at least room temperature. It would have been obvious to one of ordinary skill in the art to control the relative temperatures  $T_s$  and  $T_c$  *throughout* the sterilization process, including after step (c), in order to prevent condensation and freezing of water within the water reservoir.

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As to claims 39, 40, 42, 46- 48, 52, and 53, as Robitaille et al. discloses repeating steps (b) and (c) "several times," it is deemed obvious to one of ordinary skill in the art to repeat the steps any number of times necessary to achieve the desired level of humidity. Moreover, as Robitaille et al. teaches the final water vapor pressure is about 50 mbar (37.5), dependent upon temperature within the sterilization chamber, repeating the steps 10 times would have resulted in each step increasing the water vapor pressure by 3.75 torr. See paragraph [0084].

With respect to claims 41 and 54, it would have been obvious to one of ordinary skill in the art to optimize the temperature of the humidification chamber in order to optimize vaporization of the water and prevent condensation/freezing of the water therein. Determination of an appropriate temperature is well-within the purview of one in the art.

As to claim 51, Robitaille et al. discloses a sterilization chamber **10**, a reservoir **32**, a conduit and valve **34** connecting the reservoir and chamber, a heating means to control the temperature of the reservoir ([0052]), a heating means to control the temperature of the sterilization chamber (last two sentences of [0083]), a chamber pressure sensor **104**, a vacuum pump **40**, and a processor **108** for controlling the entire

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sterilization apparatus and process. Although Robitaille et al. fails to specifically enumerate temperature sensors within the reservoir and chamber, it would have been obvious to include such as Robitaille et al. teaches that it is necessary to control both of these temperatures for optimization of water vaporization and prevention of condensation/freezing.

## Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH L. MCKANE whose telephone number is (571)272-1275. The examiner can normally be reached on Mon-Fri; 5:30 a.m. - 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/ Primary Examiner, Art Unit 1797

elm 27 October 2008